

Electrical Plan Review Submittal Guide

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Introduction

Although electrical plans are checked for compliance with many sections of the National Electrical Code, the main focus of our review is the load on the service and feeders of the electrical system(s), and proper design of emergency and standby systems. Our review starts at the branch circuit level and investigates equipment and conductors in the load path back to the service point.

The pages following this introduction describe the information needed to review your electrical plans and load data. We have included instructions, sample forms, and schedules to demonstrate an acceptable format that can be used to present your supporting documentation. You may use our forms, or you may create your own. These forms are designed to assist you in assembling an accurate presentation so as to demonstrate that your design is in compliance with the appropriate codes.

The "Electrical Plan Review Submittal" form shown on page 9 must be completed and enclosed with all plan submittals. The information in items 1 through 10 on this form is entered into our database and provides us the details needed to identify, track, and record your project. Plans sent in without a submittal form will be rejected upon receipt. If you would like this form in an electronic version please call Bill Eckroth at (360) 902-5254.

The documentation as outlined in the Screen In Check List <u>must be</u> presented in order for the plans examiner to begin a review. **Plans lacking the appropriate screen-in information will be disapproved and sent back.**

The Electrical Plan Review staff would like to hear any suggestions or concerns you may have about the review process. We welcome your constructive comments.

RCW and WAC Requirements for Electrical Plan Review

Revised Code of Washington (RCW) 19.28 states that electrical installations "shall be in conformity with approved methods of construction." The standards used for "approved methods" are listed in Washington Administrative Code (WAC) 296-46B-010 and include the currently adopted editions of NFPA 70 (National Electrical Code), NFPA 20 (Centrifugal Fire Pumps), and NFPA 110 (Emergency and Standby Power Systems).

WAC 296-46B-010 (14) provides classification or definition of occupancies. WAC 296-46B-010 (16) and Table 010-1 specify the occupancies for which plan review is required.

WAC 296-46B-010 (16)(h) requires that plans that are to be reviewed by the department "...The plans must clearly show the electrical installation or alteration in <u>floor plan view</u>, include switchboard and/or panelboard schedules and when a service or feeder is to be installed or altered, must include a riser diagram, load calculation, fault current calculation and interrupting rating of equipment. Where existing electrical systems are to supply additional loads, the plans must include documentation that proves adequate capacity and ratings. The plans must be submitted with a plan review submittal form available from the department..."

Riser diagrams and load calculations must include all of the equipment carrying the additional loads and be complete to the point of connection between the facilities of the serving utility and the premises wiring. NEC 215-5 requires that the details of such diagrams and calculations shall include "... the area in square feet of the building or other structure supplied by each feeder, the total calculated load before applying demand factors, the demand factors used, the calculated load after applying demand factors, and the size and type of conductors to be used."

WAC 296-46B-010 (15) states "(15) Plan review is a part of the electrical inspection process; its primary purpose is to determine: (a) That service/feeder conductors are calculated and sized according to the proper NEC or WAC article or section; (b) The classification of hazardous locations; and (c) The proper design of emergency and standby systems." The Electrical Plans Examiner's responsibility is to review plans for electrical installations to verify compliance with the National Electrical Code and Washington State Rules and Regulations.

For the latest Electrical RCW and WAC rules please visit our web site at: www.Lni.wa.gov/TradesLicensing/Electrical

Electrical Plan Review Staff

Phone Numbers and Mailing Address

Please direct <u>all</u> billing calls and plan status checks to Bill Eckroth. The plan review supervisor will address technical or plan review policy questions.

Chief Electrical Inspector:

Ron Fuller

Telephone Number: 360.902.5249

Fax Number: 360.902.5229

Plan Review Supervisor:

Bill Eckroth

Phone number: 360.902.5254 Fax Number: 360.902.5296

<u>Plans Examiner:</u> <u>Plans Examiner:</u>

Mike Buettner Bill Dozier

Phone number: 360.902.5253 Phone number: 360.902.5248 Fax Number: 360.902.5296 Fax Number: 360.902.5296

<u>Plans Examiner</u>: <u>Plans Examiner</u>:

Norm Williams (Temporary Position)

Phone Number: 360.902.5247 Phone Number: 360.902.xxxx Fax Number: 360.902.5296 Fax Number: 360.902.5296

Please address all mail to: Electrical Plan Review

Attn.: Bill Eckroth

Street Address: 7273 Linderson Way SW

Tumwater, WA 98502

Mailing Address: PO Box 44460

Olympia, WA 98504-4460

Plan review fees are based on a percentage of the electrical inspection fee that is calculated during the review. You will be billed for the plan review fee after the review is completed.

Plans Examiner Geographical Areas

Electrical Plans are not assigned based upon a geographic area

Plan Review in Cities Doing Electrical Inspections

If the project you are submitting is within the inspection jurisdiction of the cities listed on page 8, Labor and Industries **does not** do the plan review. You will have to submit your plans to the city responsible for the electrical inspection.

Labor and Industries Service Locations 2005

ABERDEEN (MS WA42

415 W Wishkah STE 1B Aberdeen WA 98520-0013 360.533.8200 Fax: 360.533.8220 Electrical Supervisor Bob Thomas 360.902.5201

BELLEVUE (MS NB75)

616 120th Ave. NE #C201 Bellevue WA 98005-3037 425.990.1400 Fax: 425.990.1446 Electrical Supervisor Dick Gilcrist 425.990.1420

BELLINGHAM (MS BHAM)

1720 Ellis St. STE 200 Bellingham WA 98225 360.647.7300 or 7320 Fax: 360.647.7310 Electrical Supervisor Dennis Patterson 360.416.3020

BREMERTON (MS WB07)

500 Pacific Ave. STE 400 Bremerton WA 98337 360.478.4921 Fax: 360.415.4048 Electrical Supervisor Gerry Jessen 360.415.4015

COLVILLE (MS SPOK)

298 S Main STE 203 Colville WA 99114-2416 509.684.7417 Fax: 509.684.7416 Electrical Supervisor Jerry Clark 509.324.2532

EVERETT (MS TB26)

729 100Th St SE Everett WA 98208-2620 425.290.1300 Fax: 425.290.1399 Electrical Supervisor Jim Hinrichs 425.290.1320

KENNEWICK (MS KENN)

4310 W. 24th Ave Kennewick WA 99338-1992 509.735.0138 Fax: 509.735.0120 Electrical Supervisor Dene Koons 509.735.0130

LONGVIEW (MS LONG)

900 Ocean Beach Hwy Longview WA 98632 360.575.6900 Fax: 360.575.6918 Electrical Supervisor Steve Thornton 360.896.2356

MOSES LAKE (MS MLAK)

3001 W Broadway Ave Moses Lake WA 98837-2907 509.764.6900 Fax: 509.764.6923 Electrical Supervisor Gary Gooler 509.454.3763

MOUNT VERNON (MS MTVE)

525 E College Way STE H
Mt. Vernon WA 98273-5500
360.416.3000
Fax: 360.416.3030
Electrical Supervisor
Dennis Patterson 360.416.3020

OKANOGAN (MS OKAN)

1234 2nd Ave. S Okanogan WA 98840-0632 509.826.7345 Fax: 509.826.7349 Electrical Supervisor Gary Gooler 509.454.3763

PORT ANGELES (MS WTAN)

1605 E Front St. STE C
Port Angeles WA 98362-4628
360.417.2702
Fax: 360.417.2733
Electrical Supervisor
Gerry Jessen 360.415.4015

PULLMAN (MS SPOK)

1250 Bishop Blvd. STE G Pullman WA 99163-0847 509.334.5296 Fax: 509.334.3417 Electrical Supervisor Jerry Clark 509.324.2532

SPOKANE (MS SPOK)

901 N Monroe STE 100 Spokane WA 99201-2149 509.324.2640 Fax: 509.324.2655 Electrical Supervisor Jerry Clark 509.324.2532

TACOMA (MS WT21)

950 Broadway, Suite 200 Tacoma WA 98402 253.596.3808 Fax: 253.596.3956 Electrical Supervisor Jack Knottingham 253.596.3815

TUKWILA (MS TB52)

12806 Gateway Drive Tukwila WA 98168 206.835.6630 Fax: 206.835.6636 Electrical Supervisor Jack Oxford 206.835.1085

TUMWATER (MS 4814)

7273 Linderson Way SW Tumwater WA 98501 360.902.5269 Fax: 360.902.6340 Electrical Supervisor Bob Thomas 360.902.5201

VANCOUVER (MS S-14)

312 SE Stonemill Drive STE 120 Vancouver WA 98684 360.896.2300 Fax: 360.896.2345 Electrical Supervisor Steve Thornton 360.896.2356

WALLA WALLA (MS WALL)

1815 Portland Ave. STE 2 Walla Walla WA 98362-2246 509.527.4437 Fax: 509.527.4486 Electrical Supervisor Dene Koons 509.735.0130

WHITE SALMON (MS S-14)

107 West Jewett Blvd, White Salmon, WA 98672 509.493.5041 Fax: 360.896.2394 Electrical Supervisor Steve Thornton 360.896.2356

EAST WENATCHEE (MS EWEN)

519 Grant Rd
E. Wenatchee WA 98802-5459
509.886.6500
Fax: 509.886.6510
Electrical Supervisor
Gary Gooler 509.454.3763

YAKIMA (MS YAKI)

15 W Yakima Ave. STE 100 Yakima WA 98902-3401 509.454.3760 Fax: 509.454.3710 Electrical Supervisor Gary Gooler 509.454.3763

REVISION DATE: 09-13-2005

City Electrical Inspectors

City of Aberdeen

James Criel, Inspector 200 E Market Street Aberdeen WA 98502 360.537.3275 Fax 360.537.3386

City of Bellevue

Bob Lloyd, Inspector 11511 Main Street Bellevue WA 98009 425.452.7911 Fax 425.452.7930

City of Bellingham

Steve Johnson, Inspector 210 Lottie Street Bellingham WA 98225 360.676.6550 Fax 360.738.7358

City of Burien

Dan Cruz, Inspector 415 SW 150th Burien WA 98146 206.241.4647 Fax 206.248.5539

City of Des Moines

Rex Christensen, Inspector 21650 11th Ave S Des Moines WA 98198 206.870-7576 Fax 206.870.6544

City of Eatonville

Nestor Sundita, Inspector PO BOX 309 Eatonville WA 98328 360.832.3361 Fax 360.832.3977

City of Everett

Tim Alaniz, Inspector 3200 Cedar Street Everett WA 98201 425.259.8810 Fax 425.257.8856

City of Federal Way

Joseph Szpek, Inspector 33530 1st Way South Federal Way WA 98003 253.661.4152 Fax 253.835,2609

City of Kirkland

Clell Mason, Inspector 123 Fifth Ave Kirkland WA 98033 425.587.3600 Fax 425.828.1292

City of Lacey

_____, Inspector PO BOX 3400 Lacey WA 98509 360.491.5642 Fax 360.438.2669

City of Longview

Wayne Wagner, Inspector PO BOX 128 Longview WA 98632 360.442.5085 Fax 360 442.5953

City of Lynnwood

John Olsen, Inspector PO BOX 5008 Lynnwood WA 98046 425.670.6271 Fax 425.771.6585

City of Mercer Island

Al Davis, Inspector 9611 SE 36th Street Mercer Island WA 98040 206.236.5300 Fax 206.236.3599

City of Milton

Tacoma Power Inspections 253.502.8659 Milton Power 1000 Laurel ST Milton, WA 98354 253.922.8738

City of Mountlake Terrace

Kevin Kennedy, Inspector 2304 58th AVE W Mountlake Terrace WA 98043-4697 425.744.6268 Fax 424.778.6421

City of Normandy Park

801 SW 174th ST Normandy Park, WA 98166 206.248.7603 Fax 206.439.8674

City of Olympia

Scott Hopp, Inspector PO Box 1967 Olympia WA 98507 360.753.8337 / Fax 360.753.8087

City of Port Angeles

Al Oman, Inspector 240 W Front Port Angeles WA 98632 360.417.4735 Fax 360.417.4711

City of Redmond

Jeff Shepard, Inspector 15670 NE 85th St Redmond WA 98052 425.556.2473 Fax 425.556.2400

City of Renton

Byron Wilson, Inspector 1055 S Grady Way Renton WA 98055 425.430.7200 Fax 425.430.7231

City of Sea Tac

Jerry Berndt/Bill Buterbaugh, Inspectors 17900 International Bldg. Sea Tac WA 98188 206.973.4750 Fax 206.973.4769

City of Seattle

Dick Alford/Mark Gibbs, Chief 710 5nd Ave Ste 2000 Seattle WA 98104 206.684.8421 Fax 206.386.4039

City of Spokane

Ardee Ableman, Supervisor W 808 Spokane Falls Spokane WA 99201 509.625.6300 Fax 509.625.6822

City of Tacoma

Bruce Reynolds, Chief Pro-Tem & Plans Examiner 3628 S 35th Tacoma WA 98409 253.502.8347 Fax 253.502.8659

City of Vancouver

Cindy Peterson, Building Official PO BOX 1995 Vancouver WA 98668 360.735.8873 Ext. 4140 Fax 360.696.8263

DEPARTMENT OF LABOR & INDUSTRIES Electrical Plan Review Submittal

I & HISE ONLV	

1. Project:	2. Project Address (Street Address and City):											
3. Submitter Name and Mailing Address (Federal Expre	ss):											
4. Project Owner:	5. Is the facility licensed by DOH or DSHS? □ YES □ NO If YES, how is it licensed?:											
6. Electrical Design Contact Person:	Telephone Number:	Fax Number:										
	()	()										
7. General Job Description:												
8. Proposed Construction Start Date:	9. Proposed Construction	Completion Date:										
6. 110poseu Construction Start Date:	2. 1 Toposed Construction	Compiction Date:										
10. SPI Funded School Project? ☐ YES ☐ NO	School District:											
If YES, proposed bid date:												

Has the Plan Review Screen In Check List been reviewed and included □

(Following this procedure will expedite the review process and plan approval. Missing items may cause the presentations disapproval and added fees charged)

1. Project:

Name of the facility.

EXAMPLE: Mukilteo Elementary School

2. Project Address:

Facility (inspection) address as assigned by local building or planning department. Include the city in which the project is located.

EXAMPLE: 1101 First Ave - Moses Lake, WA 98555

3. Submitter Address:

Address of the person or firm submitting the plans for review. Please give the proper address for Federal Express delivery.

EXAMPLE: Sparling - 110 First Ave NE - Seattle, WA 98555

4. Project Owner:

Name of the person, corporation, or agency that is the registered owner of facility.

EXAMPLE: Mukilteo School District

5. Is this project licensed through Department of Health (DOH) or a contracted service with the Department of Social and Health Services (DSHS)?

What type of facility license is it? Boarding home, Nursing home, etc?

EXAMPLE: (If applicable) Boarding Home

6. Contact Person (including phone and Fax numbers):

The electrical designer or individual that can answer technical questions on electrical plans, load calculations, panel schedules, etc.

EXAMPLE: Ed Stanton 206.555.5555 Fax: 206.555.5555

7. General Description:

Provide a detailed description of the complete scope of electrical work being done; indicate whether project is new construction, addition, remodel, etc.

EXAMPLE: Portable classroom additions to the school electrical system.

8. Start Date:

Date electrical work starts.

9. Completion Date:

Date project is scheduled for completion.

10. SPI Funding Information

Does the project have state matching funds from the Office of the Superintendent of Public Instruction? If so, Bid Date and School District.

EXAMPLE: June 30, 2005 Mukilteo School District

Electrical Plan Review Screen In Check List Instructions

The following three pages contain a checklist that will be used by the assigned plan reviewer to screen in your presentation. Completing this checklist may require as little as a few minutes on very small projects such as a school portable, or as much as three to four hours for very large, complex facilities.

The intent of this process is to weed out and disapprove submittals that have multiple errors before the reviewer has spent many hours of review time on the review.

Please be aware that the Electrical Plan Review is not to be used as quality control for drafting errors, but is intended to be a review process for code compliance of the electrical system. If projects are disapproved during this process, you will be charged for the review time spent (with a one-hour minimum) and your plans will be shipped back to you along with our comments. When we receive your presentation back after disapproval your review will go to the bottom of our pending work.

Your final approved plans will not be shipped until this fee, plus the approved plan review fees, have been paid in full. Our goal is to have presentation submittals that are accurate enough so that we can spot check branch circuits without having to look at every circuit on the plans.

It is strongly suggested that you use this checklist prior to shipping us your presentation to see if it meets all of the items on the list, and please include it with your submittal package. By following this procedure we will receive a product that can be reviewed in a short time frame, and you will receive your approved plans in quick order without inspection delays.

Please note: Electrical Plan Review only requires one set of plans per submittal. If additional (duplicate) sets are submitted, a minimum of one hour will be charged per set.

Electrical Plan Review Screen In Check List

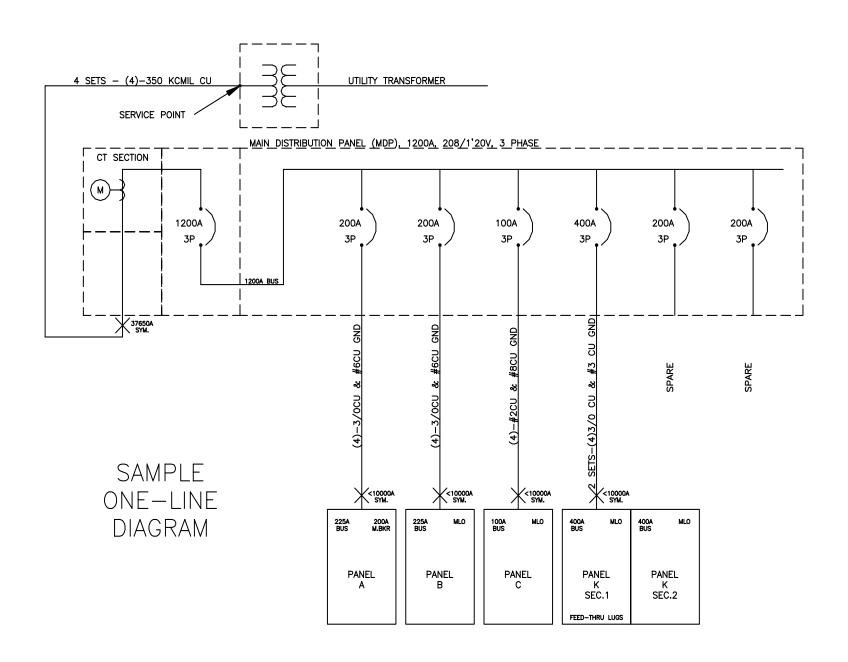
Type Of Facility Identified (Educational, Institution, Health Care, or Other)
☐ If Health Care, How It Is Licensed By The State Of Washington?
☐ Electrical Engineers Stamp And Signature, As Required By WAC, On Educational, Hospital, and Nursing Home Drawings
☐ Is The Facility Required To Have Electrical Plan Review?
☐ Location Of Facility (Is it in the States jurisdiction or a cities jurisdiction)
One Line/Riser Diagram (Shown back to service point)
□ Conductor Sizes
□ Service Point Per NEC 100 Identified
□ Fault Currents Tagged
Check Plans For Classified (Hazardous) Locations Per NEC 500
☐ If Hazardous Locations Present Must Have Documentation Per NEC 500-4(A) (Normally from Fire Marshals Office)
Hazardous Locations Shown On Plans
Specifications (Optional) For information only.
Load Calculations In VA or KVA out two decimal points.
☐ Load Break Out Per NEC 220 Categories
Computer Receptacles Not Under General Use Receptacle Demand

Electrical Plan Review Screen In Check List

☐ Correctly Used Categories For Occupancy (dwelling units, hospital rooms, etc)
☐ Demand Calculations (See NEC 220.87 & WAC 296-46B-010 (16)(j))
☐ Demand Records (Utility last 12 months or 30 day)
☐ Power Factor Correction
☐ Seasonal and Occupancy Adjustments
☐ 30 Day Demand Validity Statement with Signature (Licensed Engineer or Electrical Administrator)
☐ Date of Measurements
☐ Diagram Showing Point of Metering
Spot Check Load Calculations to Panel Schedules for Overloads
Fault Current Calculations For Complete System or
□ Note That Will Be Listed Series Rated System
Panel Schedules For All Panels With Load Increase with accurate loads shown in VA KVA out two decimal points.
Before and After Panel Schedules for Load Reductions
Lighting Fixture Schedule With Input VA Listed For Each Fixture Type
Check For Solidly Grounded Systems of 1 kv and Over and Compliance With

Electrical Plan Review Screen In Check List

Mechanical Equipment Schedule With Electrical Load Information or
☐ Mechanical Equipment Load Information On The Plans
Kitchen Equipment Schedules With Electrical Load Information
Shop Equipment Schedule With Electrical Load Information
Min. 1/8" Scale, Separate, Power Plans With Connecting Lines And Home Runs (Additional hourly fees may be required for added review time for other than this format. This also applies to the next item also.)
Min. 1/8" Scale, Separate, Lighting Plans With Connecting Lines, Home Runs, and Fixtures Identified By Type Electrical Site Plan
Random Check Of Branch Circuits On Each Sheet For Accurate Load As Compared To Panel Schedule
Check Lighting Plans For Battery Backup Fixtures Off Normal Lighting Circuit For Area Served (NEC 700.12)
Random Check Of One Line Diagram And Panel Schedule For Correct Overcurrent Protection On Service Conductors
Random Check Of One Line Diagram And Panel Schedules For Correct Overcurrent Protection On Secondary Of Transformers
Check One Line Diagram And Panel Schedules For Correct Separation Of Emergency And Backup Power Systems
Check If Generator Power System Is Present. If Checked, Identify Type Below (If there is a generator system on site, identification of system type is required.)
□ NEC 700 □ NEC 701
□ NEC 517 □ NEC 702
Check One Line Diagram And Site Plan For Correct Building Disconnects



PANEL LOAD CALCULATION WORKSHEET

Project:		Date _	/
·	Panel ID:		

LOAD TYPE	CONNECTED LOAD	CODE DEMAND FACTOR	CALCULATED DEMAND LOAD				
Lighting		X 125%	=				
General-use Receptacles (First 10KVA)		X 100%	=				
General-use Receptacles (Over 10KVA)		X 50%	=				
Motors and Compressors		X 100%	=				
(Largest Motor Load)	()	X 25%	=				
Dedicated or Specific-use Receptacles		X 100%	=				
HVAC and Mechanical Equipment Loads		X 100%	=				
Kitchen Equipment (#)		X%	=				
Miscellaneous Loads		X 100%	=				
		X%	=				
		X%	=				
		X%	=				
□ 240/120 □ 3Ø □ 208/120 □ 1Ø □ 480/277 □							
System Voltage	TOTAL CONNECTE	D LOAD TOT	AL CALCULATED LOAD				
		TOT	AL CALCULATED AMPS				

Connected Load-

- 1. The nameplate rating of all appliances that are fastened in place, permanently connected, or located to be on a specific circuit. (Water heaters, space heaters, ranges, refrigerators, etc.)
- 2. 180 VA for each general-use receptacle.
- 3. Maximum VA of lighting fixtures.
- 4. VA of all motors based on full load amps from table 430-147, 148, 149 and 150 of the National Electrical Code.

Calculated Demand Load-

The connected load after any code required adjustment factor has been applied. Load calculations shall be submitted/expressed in VA and converted to amps when sizing feeders and equipment.

Panel ID:	PANEL	Bus Rating:	A	Single	Voltage
Location:	SCHEDULE	☐ Main Breaker ☐ Main Lugs Only	A	Phase ☐ 4-wire	□ 240/120 □ 208/120
Fed From:	Single Phase	Fed-Thru Lugs Double Lugs		☐ 3-wire☐ Iso. GND	_
Panel A.I.C. Rating: 10 K 14 K 18	K □ 22 K □ 25 K	□ 42 K □ 65 K	1 0	_	(□ 200 K

	Circuit Description	LOAD(VA)	Code	Breaker	BUS	Breaker	Code	LOAD(VA)	Circuit Description	
1					Α					2
3					В					4
5					Α					6
7					В					8
9					Α					10
11					В					12
13					Α					14
15					В					16
17					Α					18
19					В					20
21					Α					22
23					В					24
25					Α					26
27					В					28
29					Α					30
31					В					32
33					Α					34
35					В					36
37					Α					38
39					В					40
41					Α					42

Code Description:

L = LIGHTING LOADS R = GENERAL USE RECEPTACLES

M = TOTAL MOTOR LOAD S = DEDICATED RECEPTACLES H = HVAC K = KITCHEN EQUIPMENT **LM** = LARGEST SINGLE MOTOR **Z** = MISC OR APPLIANCES

Panel ID:	PANEL	Bus Rating:	A	Three	Voltage
	SCHEDULE	☐ Main Breaker	A	Phase	☐ 480/277Y
Location:		☐ Main Lugs Only		☐ 4-wire	☐ 208/120Y
	Three Phase	☐ Fed-Thru Lugs		☐ 3-wire	□ 240/120∆
Fed From:		☐ Double Lugs		☐ Iso. GND	
Panel A.I.C. Rating: 10 K 14 K 18	K 🔲 22 K 🔲 25 K	☐ 42 K ☐ 65 K	1 0	0 K 🔲 150 k	200 K

	Circuit Description	LOAD(VA)	Code	Breaker	Ø	Breaker	Code	LOAD(VA)	Circuit Description	
1	•				Α					2
3					В					4
5					С					6
7					Α					8
9					В					10
11					С					12
13					Α					14
15					В					16
17					С					18
19					Α					20
21					В					22
23					С					24
25					Α					26
27					В					28
29					С					30
31					Α					32
33					В					34
35					С					36
37					Α					38
39					В					40
41					С					42

Code Description:

L = LIGHTING LOADS **R** = GENERAL USE RECEPTACLES **S** = DEDICATED RECEPTACLES

M = TOTAL MOTOR LOAD

 $\mathbf{H} = HVAC$

K = KITCHEN EQUIPMENT

LM = LARGEST SINGLE MOTOR **Z** = MISC. OR APPLIANCES

DISTRIBUTION CALCULATION WORKSHEET

Date: Name:																									
Address:																		Inspe	ectio	n Of	fice				
Project Description	ր:																								
•																									
LOAD																						CON		%	CALC.
TYPE																						TOTA	۸L		TOTAL
Lighting Loads																								x125%	
General use Receptacles≤10 KVA																								x100%	
General use Receptacles>10 KVA																								x50%	
Motors and Compressors																								x100%	
(Largest Motor)	()	()	()	()	()	()	()	()	()	()	()	x25%	
Specific-use Receptacles																								x100%	
HVAC Equipment and Mechanical																								x100%	
Kitchen Equipment																								x%	
Miscellaneous or Appliances																								x100%	
																								x%	
																								x%	
CONNECTED LOAD																									
CALCULATED LOAD																									
AMPS																									
	1		1		1		1		1		1		1		1		1		1						

PEAK DEMAND CALCULATION WORKSHEET

NEC 220-87 and WAC 296-46B-010(16)(j)

	Recorded Peak Demand on Date://	= -		KW
2.	Power Factor	÷		(P.F.)
3. 4.		-		(I .I .) KVA
	Apparent Peak Demand	= -	1.25	NVA
	NEC 220-35 adjustment factor	Χ _	1.25	
	Adjusted Peak Demand	· -		KVA
	Seasonal adjustment factor #	Χ -		
	Seasonally Adjusted Peak Demand	= -		KVA
5.	Occupancy adjustment factor *	Χ _		
	Occupancy Adjusted Peak Demand	= _		KVA
6.	Other adjustment factor(s) *	Χ _		
	Annual Peak Demand	= _		KVA
7.	New Calculated Load Added	+		KVA
	Metered demand based CALCULATED LOAD:			KVA
		•		AMPS
	Note: See WAC 296-46B-010 (16)(j) for additi	onal m	etering require	
	. , , , ,			
⊯ Ex	plain how the factor was derived for 30-day			
₽ Ex	. , , , ,			
₽ Ex	plain how the factor was derived for 30-day			
≱ Ex	plain how the factor was derived for 30-day			
≱ Ex	plain how the factor was derived for 30-day			
☀ Ex	plain how the factor was derived for 30-day sonal upancy			

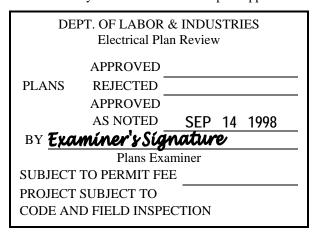
REVISION DATE: 09-13-2005

Identification of APPROVED PLANS

WAC 296-46B-010.(16)(D) requires that "approved" plans shall be available on the job site for use during the electrical installation or alteration and for use by the electrical inspector. The following illustrations represent the appearance of the approval stamps currently in use by the Labor and Industries Electrical Plans Examiners.

The large stamp below will be placed on the cover sheet of the complete plan package, on the first sheet of the electrical plans, or on both. It may be stamped with red or black ink. The signature of the electrical plans examiner will be on the approval stamp.

- **APPROVED**-Means that the plans have been approved as submitted without corrections.
- **REJECTED**-Means that the plans have <u>not</u> been approved and are invalid.
- APPROVED AS NOTED-Means that the plans have been approved and the plans examiner has included notes, intended for the electrical inspector, that describe corrections or changes in the original design submittal. These notes are always written or highlighted in RED INK and individually initialed by the plans examiner. Compliance with these notes is mandatory and a condition of the plan approval.



The small stamp below will be placed on <u>each</u> approved electrical plan sheet. It may be stamped with red or black ink. The signature of the electrical plans examiner will be on each approval stamp.



All plan sheets, specifications, calculations, and other materials are stamped with the electrical plan review number:

